## An Overview of the BPI Credentialing and Training Process

Tiger Adolf, Western Regional Director
Building Performance Institute, Inc.
Energy Retrofit Summit
San Luis Obispo County
Planning and Building Department
September 23, 2010





## **Programs to Consider**

- Energy Upgrade California
  - Utility Whole-house Prescriptive and Performance CPUC (PG&E, Edison, SoCal Gas, San Diego Electric)
  - Local ARRA-funded retrofit programs CEC Interim
- HomeSTAR federal jobs initiative with substantial rebates to reward homeowners choosing contractors from a qualified workforce that produces verifiable results
- More than 80 programs nationwide local, state, municipal energy efficiency, weatherization, and Home Performance with ENERGY STAR®







#### \$5 Billion\*

SILVER STAR

• \$3.1 Billion

GOLD STAR

\$1.5 Billion

Financing / QA / Admin

\$400 Million

Cost: \$5 Billion

Homes: 3.3 Million

Jobs: 168,000

Homeowner Saving (10 yr.): \$9.4 Billion

**Equivalent Cars Off-Road:** 615,000 Cars

Power Generation Offline: 4 x 300MW

**Plants** 

Passed the U.S. House 5/7/10 Introduced in Senate - Attached to the *Clean Energy Jobs and Oil Company Accountability Act of 2010* 





## Senator Reid on Home Star's Chances

POLITICO's Morning Energy (9/8/10)

By Josh Voorhees

#### THE EVER-SHRINKING ENERGY AGENDA -

After failing to pass a sweeping energy and climate package earlier this year, Senate Democrats are again considering taking the knife to their wish list in a bid to move whatever they can from their now-fractured agenda. "We can't get everything done at once," Majority Leader Harry Reid conceded last night at his Las Vegas clean energy forum. "We're going to have to start looking at some piecemeal legislation.

FIRST UP? - Reid suggested that one of the first pieces of energy legislation that he may try to move would be a two-pronged package of natural gas vehicle legislation and the Home Star retrofit program. "Once we get the election out of the way, I think we can do that. And even before the election I think we should take a run at it... Even Washington is ready for that, so I'm going to try."





## What's the Big Deal for Government?

- Declining fuel reserves
- Increased awareness of environmental and climate issues
- Disasters
  - Deepwater Horizon Oil Spill
  - San Bruno Natural Gas Explosion
  - West Virginia Coal Mine Explosion
- More BPI = Less BP





#### The Gulf Oil Spill vs. Home Energy Retrofits

# **Energy Savvy**





Cost of the Gulf Oil Spill clean up.....\$40 Billion

Cost to retrofit 75,000 homes for energy efficiency......\$1 Billion

EnergySavvy.com

Did we even need to drill the Deepwater Horizon oil well to begin with? Actually, no. There are over 100 million homes in the U.S. Most of them use energy inefficiently because they're not well insulated, sealed and set up. The energy contained in the biggest oil spill in U.S. history is equal to the energy that just 75,000 homes waste in a single year.

http://www.energysavvy.com/blog/2010/06/15/the-gulf-oil-spill-vs-home-energy-retrofits/





## What's the Big Deal for Consumers?



## Utah homeowners missing out on energy savings



Electric rate hike hearing opens









## **Consumer Drivers – Why People Buy Home Performance**

- Dust and Allergies
- Comfort Issues (Drafts, Hot or Cold Rooms)
- High Utility Bills
- Hazardous Materials (Asbestos, etc.)
- Moisture (wet basements, mold, etc.)
- Climate Change (i.e., carbon footprint)





## What's In It For Me for Programs?

- Meet Energy and Carbon Reduction Goals
- Manage Peak Loads
- Aggregate Carbon Emissions Savings
- Strengthen Customers' Economic Viability
- Develop a Strong "Green Jobs" Contractor Infrastructure
- Risk Management KEY





## Why Do You Care About Home Performance?

- Jobs Can't be exported
- Economy Dollars stay local
- Sustainable Creating durable, sustainable, affordable housing infrastructure from existing stock
- Programs provide leveraging to get started
- More than \$5 Billion reasons to get involved

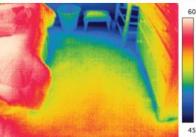




## Home performance contracting helps:

- improve energy efficiency
- enhance occupant comfort, health and safety
  - provide accountability and transparency
  - reduce risk when spending public funds















## Identify Real Problems/ Prescribe Real Solutions

- Envelope
  - air sealing
  - insulation
  - weatherstripping
- HVAC
  - duct sealing
  - HVAC system balancing
- Ventilation Drafting and combustion gases

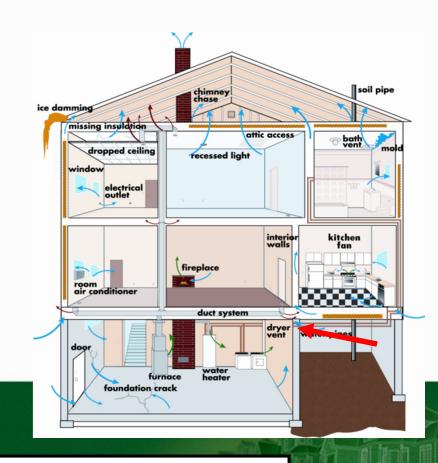






## Typical home...full of systems...

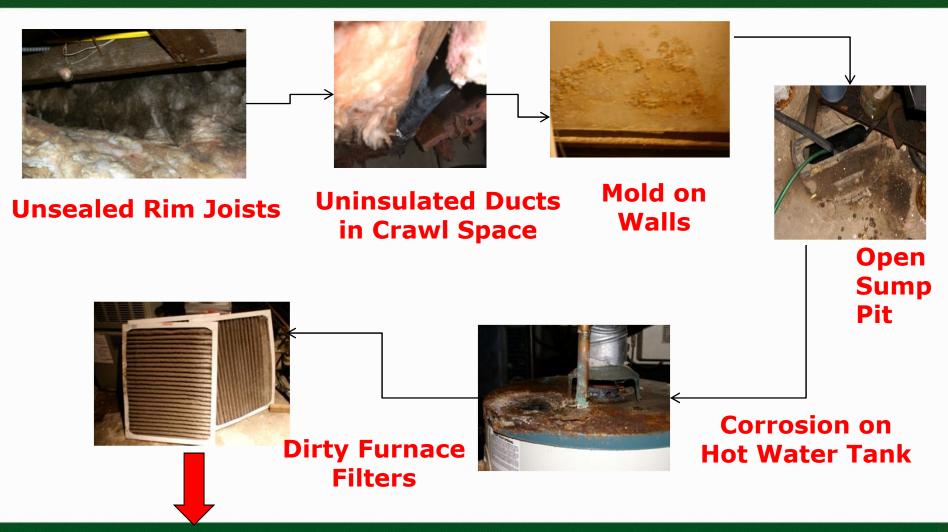
- Drainage system
- Foundation system
- Flooring system
- Wall system
- Ceiling system
- Roof system
- Heating system
- Air conditioning system
- Ventilation & IAQ systems
- Moisture control systems
- Distribution system
- Exhaust systems
- Plumbing systems in/out
- Electric, Appliance & Lighting systems
- Energy management system





Key Question: Do you know where your fresh air comes from?



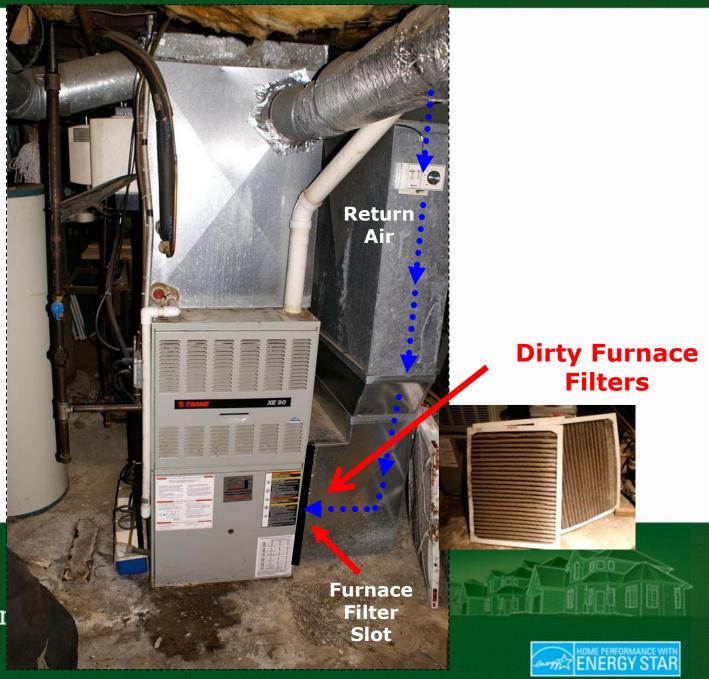








## Open combustion furnace





## What's the payback?

- Average annual energy expenses for an American family = \$2,200\*
- Average cost of home performance retrofit = \$6,000
- Average savings per home = 10-40%
- Retrofit work can pay for itself through energy savings alone in as little as 6 years...annuity returns thereafter!
  - + increased comfort for potentially higher resale value
  - + increased durability for lower maintenance costs

\*Source: ENERGY STAR® <a href="http://www.energystar.gov/index.cfm?c=products.pr\_pie">http://www.energystar.gov/index.cfm?c=products.pr\_pie</a>





### What is BPI?

- Global Leader supporting the development of:
  - highly professional building performance industry consensus standards development,
  - individual and organizational credentialing,
  - rigorous quality assurance program.
- ANSI Accredited Standards Development Organization
- Our mission is to raise the bar in performance contracting.





### **What BPI Offers**

- National technical standards for the home performance industry based on sound building science (open, transparent, consensusdeveloped process)
- Certification of individuals in professional technical designations
- Accreditation of contractors committed to delivering quality, home performance improvements
- Quality assurance to verify conformance with BPI Standards and provide feedback for continuing improvement
- Affiliation of training organizations that deliver BPI services in their market





## **BPI Expansion**

- Supported by consensus realization of the need for national building performance standards
  - U.S. Environmental Protection Agency,
  - U.S. Department of Energy,
  - U.S. Department of Housing and Urban Development,
  - Various regional, state, and local programs
- Unified efforts for raising the bar in performance contracting

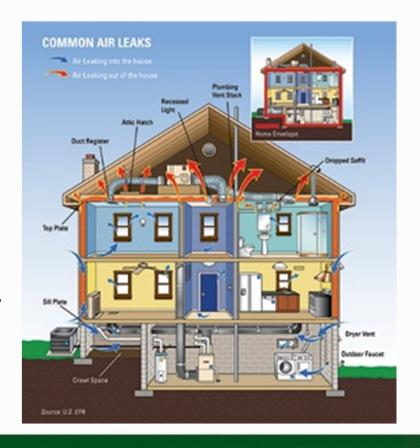




## What is Home Performance?

The systematic approach to improving the comfort, health, safety, energy efficiency and durability of your customers' homes.

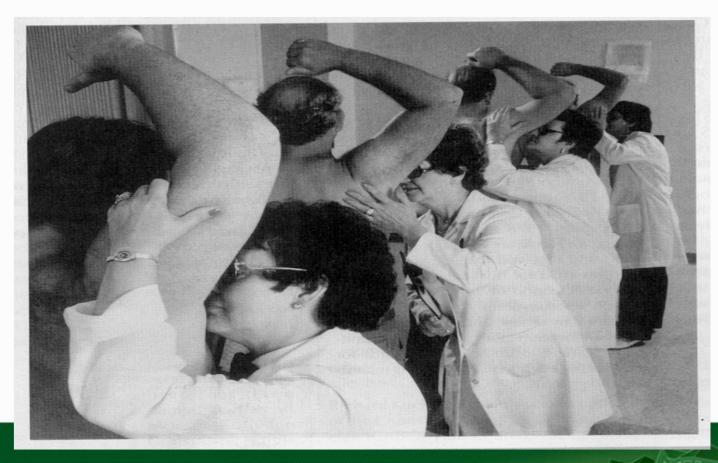
It starts with standards.







## **Need to Have Standards**







## Standards Development Process

#### **Standards Management Board**

- 5 members (1 from DOE)
- Oversees standards development
- Follows ANSI protocols

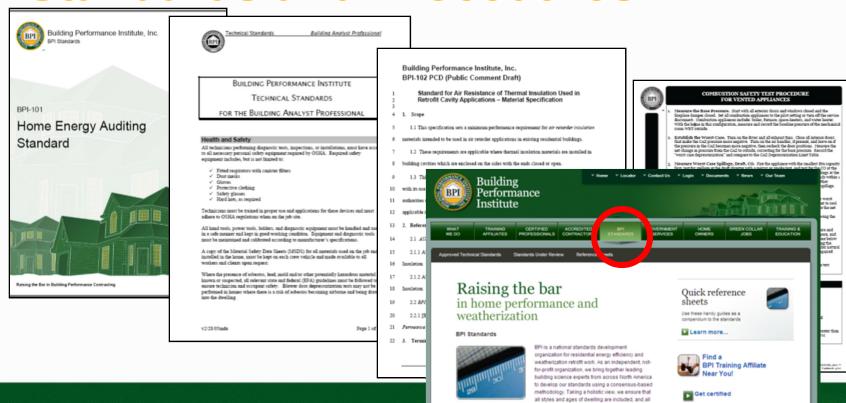
#### Standards Technical Committee

- 11 members (2 from DOE National Laboratories)
- Commissions working groups to develop and maintain standards
- Oversees public comment process





## **Each Certification has Published Standards and Procedures**



climate zones are covered.

BPI standards help provide quality and consistency by ensuring the entire home performance and weatherization workforce is following the same strict protocols – in every city and town, across each county, throughout each state and across the nation.

Unlike offering rebates for products or do-it-yourself projects that may or may not have





Train to BPI standards

## **Getting Gold Star Ready**

### 1. BPI Certified Technician

- More than 14,449 certifications held by 10,193 individuals nationwide
- 471 in CA

## 2. BPI Accredited Companies

- More than 600 accredited companies nationwide
- 9 in California

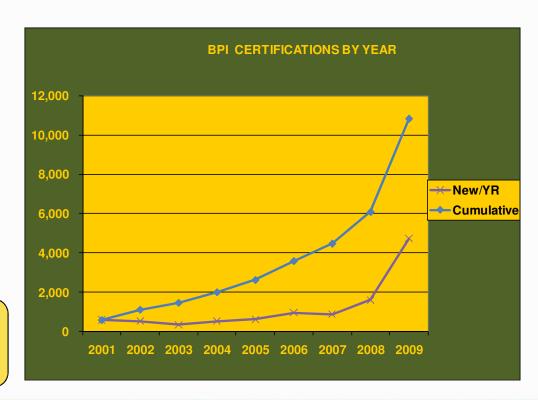




### **Growth of BPI Certifications**

| <b>BPI CEF</b> | RTIFICAT | TIONS BY YEAR               |
|----------------|----------|-----------------------------|
| Year           | New      | <b>Cumulative in Market</b> |
| 2001           | 594      | 594                         |
| 2002           | 526      | 1,120                       |
| 2003           | 352      | 1,472                       |
| 2004           | 96       | 1,568                       |
| 2005           | 347      | 1,915                       |
| 2006           | 812      | 2,727                       |
| 2007           | 606      | 3,333                       |
| 2008           | 1,243    | 4,576                       |
| 2009           | 4,127    | 8,703                       |
| Total          | 8,703    |                             |

14,449 active certifications 9/21/10







## **Affiliates Provide Training**

- Provide training/mentoring/examination services
- Classroom theory
- Hands-on field training
- Must use BPI-Approved curriculum
- Highly qualified experts provide training



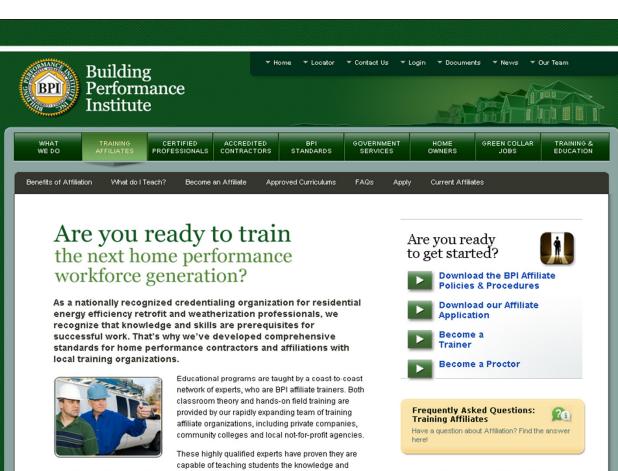
http://www.bpi.org/affiliates.aspx



# **Certification Training**

- 214 Affiliates
- 27 providing training
- 11 headquartered in CA





skills they need to be confident when challenged by exams and performing the quality of work demanded by homeowners, energy efficiency incentive and weatherization assistance programs.

- · Click here if you want to offer BPI training
- Click here if you're looking to find BPI training

#### Do you have what it takes?

Find out if you have the subject-matter expertise to teach home performance diagnostics and improvements.

Check it out!...

#### Steps to Become an Affiliate.

Learn about the process you need to follow to become a BPI training affiliate organization.

Check it out!...



Can being BPI certified and accredited help me expand my program?



Find a BPI Training Affiliate

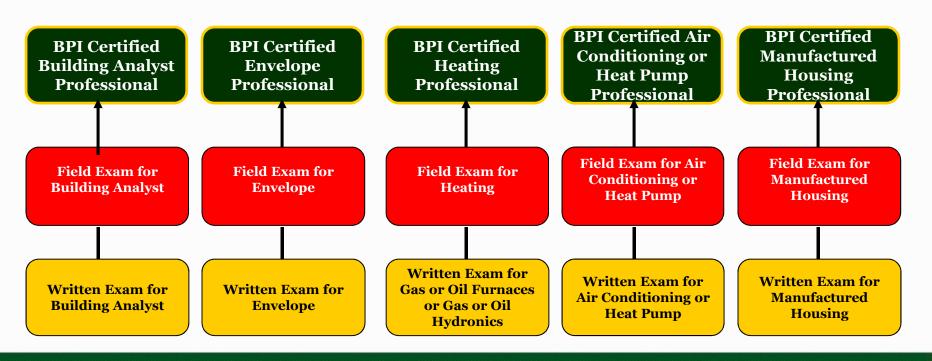
Equipment

http://www.bpi.org/affiliates.aspx



### **BPI Certification Model**

### Certification is for the Individual Technician



http://www.bpi.org/standards.aspx





### Certification of Professionals

- 9 Certifications total:
  - building energy auditing and analysis,
  - mechanical,
  - envelope,
  - mobile home ,and
  - multi-family designations
  - air leakage control and insulation installer
  - air leakage control and insulation crew chief





## What is BPI Accreditation?

A professional credential awarded by BPI to contracting companies who commit to offering comprehensive "whole house" home performance solutions for their customers.



- >600 Companies
- 9 in California

http://www.bpi.org/companies.aspx





## Why Sponsors Choose Accreditation

### Minimize Risk

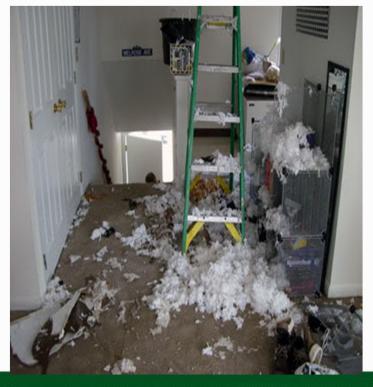
- Build a strong contractor infrastructure capable of delivering "house-as-a-system" energy retrofits.
- Ensure that contractors' work conforms to standards.
- Customer dispute resolution system in place.
- Independent, third-party quality assurance.





## Why Contractors Get Accredited

To reduce to the maximum extent possible your company's exposure to risk.









## **Accreditation of Companies**

- Organizations committed to using a quality management system
- Committed to using the whole-building performance system on every home with particular attention to health and safety
- Committed to quality assurance to verify conformance and provide feedback for continuous improvement process

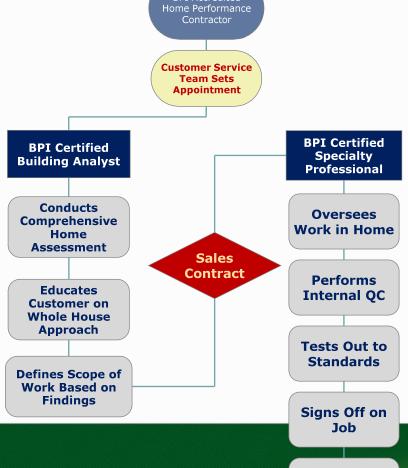




## **BPI Home Performance Contractor**

Model

Solutions Based Selling



**BPI** Accredited

Verifiable Results







# **Becoming an Accredited Company** (Qualifications)

- One Building Analyst Professional
- One Specialty Certification
- Properly licensed and bonded
- Proof of GL Insurance (\$1 Million w/BPI as Certificate Holder)
- Proof of Worker's Comp (w/BPI as Certificate Holder)
- Customer Dispute Resolution Policy





# **Becoming an Accredited Company**(Application)

- Accreditation Application (1 page)
- Application Fee (\$500 annual fee)
- Participate in on-going QA (\$1,000 first year QA fee adjusted annually based on business volume)

Building Performance Institute https://bpiforms.rsmhosting.com/Appforaccreditation.aspx



# **Elements of Quality Assurance**

- Elements of the quality assurance program, administered by a network of quality assurance providers, include:
  - Complete documentation of every home performance job performed
  - Periodic audits of documentation
  - Periodic, random inspections of field work
  - Homeowner surveys







# The Other Reason to Get Accredited

Differentiate yourself from your competition by verifying for your customers that you are delivering the performance improvements that they expect.







## **Top-Tier Contractor Traits**

- 1. **Diversification-** Sells more then one product to help prevent seasonality and drive more profits through add-on sales.
- 2. Sales Consistency- Has pitch book or laptop in-home presentation that keeps salespeople consistent and helps overcome hidden objections.
- 3. Diverse Marketing- Spend money on mix of traditional advertising and social media outreach with a clear call-to-action message.
- 4. Sales Culture- Start with receptionist to installation team
- 5. Financing- Offer low monthly payment and/or "same as cash" options

Top-Tier Contractors have the tools and training to close the sale "at the kitchen table"





## What's In It For Me for Contractors?

- Brand Recognition Differentiation
- Access to Resources
  - Educational
  - Business Training
  - Marketing Outreach
- Independent, 3<sup>rd</sup> Party Quality Assurance
- Feedback on Best Practices
- Marketing Materials





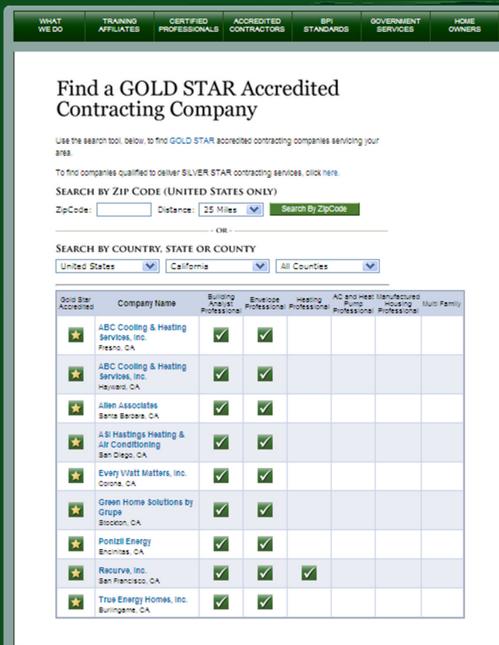
# Say fly-

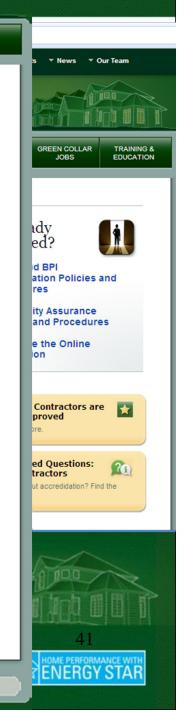
Get the job d

Com (###

Raising the performance







TRAINING & EDUCATION

**GREEN COLLAR** 

JOBS

# **Summary of the Value Proposition**

#### **SALES BENEFITS**

- Offer customer complete solutions
- HP uses a systematic approach
- Expand your scope of services
- Improve your closing rates
- Be selective about projects
- Perform larger value projects
- Offer competitive financing Examples

NY: Average Project = \$8,500 CA: Average Project = \$12,000

#### **OPERATIONAL BENEFITS**

- Differentiate business
- Reduce staff down time
- Retain high quality staff
- Identify qualified staff to hire
- Minimize call back costs
- Fewer customer complaints
- Manage your risk
- Customer satisfaction/referrals
- Increased profitability
- Ability to sleep, knowing you did it right, the first time







# This Is Too Expensive!

"I don't have the time or resources to invest in these kinds of systems."

BPI's combined Accreditation/QA fee is \$.003 for every dollar of revenue.

(\$500 annual fee + \$1000 QA inspections/\$500,000 gross = \$0.003 per dollar)

Accreditation/Quality Assurance adds about \$15 to the average \$5,000 job.





# **Quality Assurance Costs**

- Single Service doing 100 Jobs/year
  - Old Gross: 100 jobs/year X \$2,500 = \$250,000
- •Home Performance Average = \$5,000
  - •Cost of QA = \$1,500 (\$1,500 / 100 = \$15/job)
  - •New Gross: 100 Jobs X \$5,000 = \$500,000 \$1,500 QA Costs = \$498,500





## So Be a Hairdresser

### California State Board of Cosmetology License Information

In order to obtain a license for aesthetic services in the State of California, students must complete the requirements listed below.

#### **Training Requirements**

- Cosmetologist (hairdresser):1,600 hours
- Esthetician: 600 hours
- Nail Specialist: 250 hours
- Natural Hairstylist: 300 hours
- Waxer: 75 hours





# Challenge of Becoming a Hair Dresser

- You must correctly answer at least 75 percent of written exam questions correctly
- All exam results are reported as either *passed* or *failed*
- If you pass the written exam, you will receive a notice in the mail
- At a later date, you will be sent an admission notice with the date, time and location of the **practical exam** for which you are scheduled.
- Must appear with all equipment, hire your own model, and be fully prepared to perform
- Training: \$5,000 \$12,000
- Anticipated earnings: \$25,000-\$30,000 annually





## **How Much Risk Can There Be?**





## Beautician vs. HP Contractor

What happens if your hairdresser makes a mistake?



#### Bad Hair Day

What happens if your home improvement contractor makes a mistake?

CO Spillage/ Mold/ "Sick Houses"



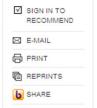
| HOME PAG                         | 3E T | ODAY'S PAPER  | VIDEO | MOST POPULAR | TIMES TOPICS |        |        |         |
|----------------------------------|------|---------------|-------|--------------|--------------|--------|--------|---------|
| The New York Times N.Y. / Region |      |               |       |              |              |        |        |         |
| WORLD                            | U.S. | N.Y. / REGION | BUSIN | NESS TECHNOI | LOGY SCIENCE | HEALTH | SPORTS | OPINION |

#### Three Die From Carbon Monoxide Poisoning in Connecticut

By PATRICK HEALY; Avi Salzman contributed reporting for this article Published: Tuesday, January 13, 2004

Gas-burning furnaces filled two homes on Long Island and in Connecticut with carbon monoxide in the last few days, poisoning the occupants during a lull in a cold snap.

The Long Island residents escaped. But in Connecticut, three people -including two women who had arrived to help the family -- were
killed.



In a gray Victorian home in East Lyme, Conn., David and Kelly Dunn and their two daughters felt as if they had been stricken with the flu. On Saturday, the family decided to stay inside. Ms. Dunn's mother and a family friend stayed with the Dunns to help them recuperate, the Connecticut State Police said.

On Sunday night, another relative found the family lying on the first floor of the house. Relatives and neighbors soon realized that the flulike symptoms had been an early sign of carbon monoxide poisoning, the police said.

Ms. Dunn's mother, Aralia Cameron, and Kathleen Dumais, the women who had come to help, were dead at the scene. Mr. Dunn died yesterday after being flown to a hospital in Rhode Island. His wife and daughters, Chelsea, 8, and Elissa, 3, were in critical condition last night at Hartford Hospital, the police said.

Ronald Pringle, chief of the Niantic Fire Department, said carbon monoxide had built up in the home because of a plugged flue pipe attached to a propane heater in the basement. The family had also sealed several windows with plastic, a move that kept the cold at bay but also trapped the gas, officials said.



# **Civil suit** targets 12 for carbon monoxide deaths

Three local men indicted for manslaughter

#### Aspen Carbon Monoxide Deaths Lead To Charges

By Robert Weller M. Aspen: CO: USA | Jul 27, 2010

VIEWS: 285 (1) 6 (1) 1









Es See All Images

Parker and Caroline Lofgren and their two children Owen and Sophie were killed by ...

Two County Staff Among Three Charged In Deaths In World Famous Resort Town

The deaths of four members of a Denver family in a home just east of Aspen during the Thanksgiving weekend two years ago has resulted in the indictments of three people, including a building inspector and building plans' inspector.









## **BPI Certification and Accreditation**

Do the Job Right.
The First Time.
Every Time.





## **Contact**

Tiger Adolf

Western Regional Director

Building Performance Institute, Inc. (BPI)

518.951.0666 (Cell)

tadolf@bpi.org

www.bpi.org

Training, Accreditation, Quality Assurance



